



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

May 7, 2015

Water System No. 3500505

Mr. Kelly Moore, Resort Manager
Thousand Trails San Benito Preserve
16225 Cienega Road
Paicines, CA 95043

Attention Mr. Moore:

CITATION NO. 02_05_15C_004

**VIOLATION of TITLE 22, CALIFORNIA CODE OF REGULATIONS, SECTION 64426.1
FOR MARCH 2015**

Enclosed is a Citation issued to the Thousand Trails San Benito Preserve (System) public water system.

The System will be billed at the State Water Resources Control Board's (Water Board) hourly rate (currently estimated at \$128.00) for the time spent on issuing this Citation. California Health and Safety Code Section 116577 provides that a public water system must reimburse the Water Board for actual costs incurred by the Water Board for specified enforcement actions, including, but not limited to, preparing, issuing, and monitoring compliance with a citation. At this time, the Water Board has spent approximately three hours on enforcement activities associated with this violation.

The System will receive a bill sent from the Drinking Water Fee Branch in August of the next fiscal year. This bill will contain fees for any enforcement time spent on the System for the current fiscal year.

If you have any questions regarding this matter, please contact Shaminder Kler of my staff at (831) 655-6938 or me at (831) 655-6934.

Sincerely,

A handwritten signature in blue ink that reads "Jan Sweigert".

Jan R. Sweigert, P.E.
District Engineer, Monterey District Office
Northern California Field Operations Branch
Drinking Water Program

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

Thousand Trails San Benito Preserve
May 7, 2015

Enclosures

Certified Mail No. 7008-1830-0004-5435-4507

cc: Equity Lifestyle Properties, Incorporated
Two North Riverside Plaza, Suite 800
Chicago, IL 60606

San Benito County Environmental Health Department

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER

TO: Thousand Trails San Benito Preserve

Attn: Mr. Kelly Moore, Resort Manager
16225 Cienega Road
Paicines, CA 95043

CITATION NO. 02_05_15C_004

VIOLATION OF TITLE 22, CALIFORNIA CODE OF REGULATIONS

SECTION 64426.1

TOTAL COLIFORM MAXIMUM CONTAMINANT LEVEL VIOLATION

FOR MARCH 2015

Issued on May 7, 2015

Section 116650 of the California Health and Safety Code (hereinafter “CHSC”) authorizes the State Water Resources Control Board (hereinafter “Water Board”) to issue a citation to a public water system when the Water Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4), (hereinafter “California SDWA”), or any regulation, standard, permit, or order issued or adopted thereunder.

The Water Board hereby issues a citation to the Thousand Trails San Benito Preserve (hereinafter "System") for failure to comply with Title 22, California Code of Regulations (CCR), Section 64426.1.

1 A copy of the applicable statutes and regulations is included in Appendix 1, which is
2 attached hereto and incorporated herein by this reference.

3 4 **STATEMENT OF FACTS**

5
6 The System is classified as a transient non-community public water system that
7 serves domestic water to RV and tent campers in the Thousand Trails facility. The
8 System serves an approximate population of 1,000 individuals through 160 service
9 connections.

10
11 The Water Board received laboratory results for 19 distribution bacteriological
12 samples collected during March 2015 from the System. All samples were analyzed
13 for the presence of total coliform bacteria. Seven of the 19 samples analyzed were
14 positive for total coliform bacteria.

15 16 **DETERMINATION**

17
18 Title 22, CCR, Section 64426.1, Total Coliform Maximum Contaminant Level (MCL)
19 states that a public water system is in violation of the total coliform MCL if it collects
20 fewer than 40 bacteriological samples per month has violated the regulation if more
21 than one sample collected during any month is total coliform-positive.

22
23 The System took fewer than 40 bacteriological samples during March 2015. The
24 results of seven samples were total coliform positive. Therefore, the Water Board has
25 determined that System violated Title 22, CCR, Section 64426.1 in March 2015.

DIRECTIVES

System is hereby directed to take the following actions:

1. Comply with Title 22, Section 64426.1, in all future monitoring periods.
2. On or before **June 5, 2015**, notify all persons served by the System of the violation of 64426.1 in conformance with Title 22, CCR, Sections 64463.4 and 64465. Appendix 2: Notification Template may be used to fulfill this directive. The notice shall be posted in conspicuous locations throughout the area served by the System and shall continue for seven consecutive days.
3. Pursuant to Title 22, CCR, Section 64424(d), collect and have analyzed for total coliform bacteria five (5) routine bacteriological samples on or before April 31, 2015, as instructed by the Water Board to System staff by electronic mail dated April 7, 2015.
4. Complete Appendix 3: Compliance Certification Form. Submit it together with a copy of the public notification to the Water Board on or before **June 15, 2015**.
5. Submit to the Water Board the information required by Title 22, CCR, Section 64426, subsection (b)(2) on or before **June 15, 2015**. Appendix 4: Positive Total Coliform Investigation may be used to fulfill this directive.
6. Submit to the Water Board an updated Bacteriological Sample Siting Plan (BSSP) on or before **June 15, 2015**. Appendix 5: Small Water System BSSP may be used to fulfill this directive.

1 All submittals required by this Citation shall be submitted to the Water Board at the
2 following address:

3
4 Jan Sweigert, P.E.
5 District Engineer
6 State Water Resources Control Board
7 Division of Drinking Water
8 1 Lower Ragsdale Drive, Building 1, Suite 120
9 Monterey, CA 93940
10

11 The Water Board reserves the right to make such modifications to this Citation as it
12 may deem necessary to protect public health and safety. Such modifications may be
13 issued as amendments to this Citation, and shall be effective upon issuance.
14

15 Nothing in this Citation relieves the System of its obligation to meet the requirements
16 of the California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4,
17 commencing with Section 116270), or of any regulation, standard, permit or order
18 issued thereunder.
19

20 **PARTIES BOUND**

21
22 This Citation shall apply to and be binding upon the System, its owners, shareholders,
23 officers, directors, agents, employees, contractors, successors, and assignees.
24

25 **SEVERABILITY**

26
27 The directives of this Citation are severable, and the System shall comply with each
28 and every provision thereof notwithstanding the effectiveness of any provision.
29

FURTHER ENFORCEMENT ACTION

Division 104, Part 12, Chapter 4, (commencing with Section 116270) of the California Health and Safety Code authorizes the Water Board to: issue a citation with assessment of penalties if a public water system continues to fail to correct a violation identified in a citation; take action to suspend or revoke a permit that has been issued to a public water system if it has violated applicable law or regulations or has failed to comply with orders of the Water Board; and petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the Water Board. The Water Board does not waive any further enforcement action by issuance of this citation.

Jan Sweigert

Jan Sweigert, P.E.
District Engineer, Monterey District Office
Northern California Field Operations Branch
Division of Drinking Water

May 7, 2015

Date

**Appendices (5):**

1. Applicable Statutes and Regulations
2. Notification Template
3. Compliance Certification Form
4. Positive Total Coliform Investigation Report Form
5. Bacteriological Sample Siting Plan

Certified Mail No. 7008-1830-0004-5435-4507

APPENDIX 1: APPLICABLE AUTHORITIES

Section 116650 of the CHSC states in relevant part:

- (a) If the Department determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the Department may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The Department may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

California Code of Regulations, Section 64424 states in relevant part:

- (d) If a public water system for which fewer than five routine samples/month are collected has one or more total-coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier may request the Department waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:
 - (1) The Department conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect the public health.
 - (2) The Department determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with §64426.1.

California Code of Regulations, Section 64426 states in relevant part:

- (a) Any of the following criteria shall indicate a possible significant rise in bacterial count:
 - (3) A system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;
 - (4) A system has a sample which is positive for fecal coliform or *E. coli*; or
 - (5) A system fails the total coliform Maximum Contaminant Level (MCL) as defined in §64426.1.
- (b) When the coliform levels specified in subsection (a) are reached or exceeded, the water supplier shall:
 - (1) Contact the Department by the end of the day on which the system is notified of the test result or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the Department office is closed, in which case the supplier shall notify the Department within 24 hours; and
 - (2) Submit to the Department information on the current status of physical works and operating procedures which may have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:
 - (A) Current operating procedures that are or could potentially be related to the increase in bacterial count;
 - (B) Any interruptions in the treatment process
 - (C) System pressure loss to less than 5 psi;
 - (D) Vandalism and/or unauthorized access to facilities;
 - (E) Physical evidence indicating bacteriological contamination of facilities;
 - (F) Analytical results of any additional samples collected, including source samples;
 - (G) Community illness suspected of being waterborne; and
 - (H) Records of the investigation and any action taken

California Code of Regulations, Section 64426.1 states in relevant part:

- (b) A public water system is in violation of the total coliform MCL when any of the following occurs:
- (1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or
 - (2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or
 - (3) Any repeat sample is fecal coliform-positive or E. coli-positive; or
 - (4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine sample is total coliform-positive.

California Code of Regulations, Section 64463.4 states in relevant part:

- (a) A water system shall give public notice pursuant to this section if any of the following occurs:
- (1) Any violation of the MCL, MRDL, and treatment technique requirements, except:
 - (A) Where a Tier 1 public notice is required under section 64463.1; or
 - (B) Where the Department determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations;
 - (2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426.1, article 3 (Primary Standards-Bacteriological Quality), for which the Department determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations;
- (b) A water system shall give the notice as soon as possible, within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system may request an extension of up to 60 days for providing the notice. This extension would be subject to the Department's written approval based on the violation or occurrence having been resolved and the Department's determination that public health and welfare would in no way be adversely affected. In addition, the water system shall:
- (1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;
 - (2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the Department's written approval based on its determination that public health would in no way be adversely affected, the water system may be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement; and
- (c) A water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:
- (2) Unless otherwise directed by the Department in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, noncommunity water systems shall give the public notice by:
 - (A) Posting in conspicuous locations throughout the area served by the water system; and
 - (B) Using one or more of the following methods to reach persons not likely to be reached by a public posting:
 1. Publication in a local newspaper or newsletter distributed to customers;
 2. E-mail message to employees or students;
 3. Posting on the Internet or intranet; or
 4. Direct delivery to each customer

Instructions for Tier 2 Unresolved Total Coliform Notice Template

Template Attached

Since exceeding the total coliform bacteria maximum contaminant level is a Tier 2 violation, you must provide public notice to persons served as soon as practical but within 30 days after you learn of the violation [California Code of Regulations, Title 22, Chapter 15, Section 64463.4(b)]. Persistent total coliform problems can be serious. **Each water system required to give public notice must submit the notice to the State Water Resources Control Board, Division of Drinking Water (DDW) for approval prior to distribution or posting, unless otherwise directed by the DDW [64463(b)].**

Notification Methods

You must use the methods summarized in the table below to deliver the notice to consumers. If you mail, post, or hand deliver, print your notice on letterhead, if available.

<i>If You Are a...</i>	<i>You Must Notify Consumers by...</i>	<i>...and By One or More of the Following Methods to Reach Persons Not Likely to be Reached by the Previous Method...</i>
Community Water System [64463.4(c)(1)]	Mail or direct delivery ^(a)	Publication in a local newspaper
		Posting ^(b) in conspicuous public places served by the water system or on the Internet
		Delivery to community organizations
Non-Community Water System [64463.4(c)(2)]	Posting in conspicuous locations throughout the area served by the water system ^(b)	Publication in a local newspaper or newsletter distributed to customers
		Email message to employees or students
		Posting ^(b) on the Internet or intranet
		Direct delivery to each customer

(a) Notice must be distributed to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system.

(b) Notice must be posted in place for as long as the violation or occurrence continues, but in no case less than seven days.

The notice attached is appropriate for the methods described above. However, you may wish to modify it before using it for posting. If you do, you must still include all the required elements and leave the health effects and notification language in italics unchanged. This language is mandatory [64465].

Multilingual Requirement

The notice must (1) be provided in English, Spanish, and the language spoken by any non-English-speaking group exceeding 10 percent of the persons served by the water system and (2) include a telephone number or address where such individuals may contact the water system for assistance.

If any non-English-speaking group exceeds 1,000 persons served by the water system, but does not exceed 10 percent served, the notice must (2) include information in the appropriate language(s) regarding the importance of the notice and (2) contain the telephone number or address where such individuals may contact the water system to obtain a translated copy of the notice from the water system or assistance in the appropriate language.

Population Served

Make sure it is clear who is served by your water system -- you may need to list the areas you serve.

Description of the Violation

The description of the violation and the MCL vary depending on the number of samples you take. The following table should help you complete the second paragraph of the template.

<u>If You Take Fewer Than 40 Samples a Month</u>	<u>If You Take 40 or More Samples a Month</u>
State the number of samples testing positive for coliform. The standard is that no more than one sample per month may be positive.	State the percentage of samples testing positive for coliform. The standard is that no more than 5.0 percent of samples may test positive each month.

Corrective Action

In your notice, describe corrective actions you are taking. If you know what is causing the coliform problem, explain this in the notice. Listed below are some steps commonly taken by water systems with a total coliform violation. Use one or more of the following actions, if appropriate, or develop your own:

- "We are chlorinating and flushing the water system."
- "We are increasing sampling for coliform bacteria."
- "We are investigating the source of contamination."
- "We are repairing the wellhead seal."
- "We are repairing the storage tank."
- "We will inform you when additional samples show no coliform bacteria."

After Issuing the Notice

Send a copy of each type of notice and a certification that you have met all the public notice requirements to the DDW within ten days after you issue the notice [64469(d)]. You should also issue a follow-up notice in addition to meeting any repeat notice requirements the DDW sets.

It is recommended that you notify health professionals in the area of the violation. People may call their doctors with questions about how the violation may affect their health, and the doctors should have the information they need to respond appropriately.

It is a good idea to issue a "problem corrected" notice when the violation is resolved.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

Thousand Trails San Benito Preserve Water System Has Levels of Coliform Bacteria Above the Drinking Water Standard

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did to correct the situation. Please share this information with other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or giving out copies by hand or mail.

We routinely monitor for the presence of drinking water contaminants. We took 19 samples to test for the presence of coliform bacteria during March 2015. Seven of those samples showed the presence of total coliform bacteria. The standard is that no more than 1 sample per month may test positive for bacteria. The positive samples were tested further for fecal coliform. No fecal coliform or E. coli were found. However, our drinking water exceeded the maximum contaminant level allowed for total coliform bacteria, as specified in Section 64426.1, Title 22 of the California Code of Regulations.

What does this mean?

The State Water Resources Control Board sets drinking water standards and has determined that the presence of total coliform bacteria is a possible health concern. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more drinking water samples than allowed. This was a warning of potential problems and a violation of the regulations.

What should I do?

This is not an emergency. If it had been, you would have been notified immediately.

People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at (800) 426-4791.

If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

Has the problem been resolved? What corrective actions have been taken to prevent this violation from occurring in the future?

This notification of the public is being done in compliance with Section 64463.4, Title 22 of the CCR as a means of keeping the public informed.

Persons wishing more information should contact: _____

APPENDIX 3. COMPLIANCE CERTIFICATION

Citation Number 02-05-15C-004

Name of Water System: Thousand Trails San Benito Preserve

System Number: 3500505

I certify that the users of the water supplied by this water system were notified of the bacteriological violation of Title 22, California Code of Regulations, Section 64426.1 for the compliance period of March 2015 and that the following actions listed below were completed:

<u>Required Action</u>	<u>Date Completed</u>
(Citation Directive 2) Public Notification-posted in conspicuous locations throughout the area served by the System and Other Notification Method completed	
(Citation Directive 3) Collect and have analyzed for total coliform bacteria five (5) routine bacteriological samples	
(Citation Directive 5) Complete and Positive Total Coliform Investigation Report.	
(Citation Directive 6) Complete and submit Bacteriological Sample Siting Plan	

Signature of Water System Representative

Date

Attach a copy of the notice posted and the laboratory results from the 5 water samples.

**THIS FORM MUST BE COMPLETED AND RETURNED TO THE DEPARTMENT NO
LATER THAN JUNE 15, 2015**

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code state that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the Safe Drinking Water Act may be liable for, respectively, a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation or, for continuing violations, for each day that violation continues, or be punished by a fine of not more than \$25,000 for each day of violation, or by imprisonment in the county jail not to exceed one year, or by both the fine and imprisonment.

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

This form is intended to assist public water systems in completing the investigation required by the State of California Water Resources Control Board - Division of Drinking Water (Section 64426(b) of Title 22, California Code of Regulations) and may be modified to take into account conditions unique to the system.

ADMINISTRATIVE INFORMATION

Entity Name:	Name	System Address & Email	Telephone Number
PWSID NUMBER:			
Operator in Responsible Charge (ORC)			
Person that collected TC samples if different than ORC			
System Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Total Coliform MCL Failure:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS (attach additional pages if needed)
1. Inspect each well head for physical defects and report						
a. Is raw water sample tap upstream from point of disinfection?						
b. Is wellhead vent pipe screened?						
c. Is wellhead seal watertight?						
d. Is well head located in pit or is any piping from the wellhead submerged?						
e. Does the ground surface slope towards well head?						
f. Is there evidence of standing water near the wellhead?						
g. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)						
h. Is the wellhead secured to prevent unauthorized access?						
i. To what treatment plant (name) does this well pump?						
j. How often does the System take a raw water total coliform (TC) test?						
k. Provide the date and result of the last TC test at this location						
2. Inspect and review records for surface water source (if applicable)						
a. Have there been any events in the watershed or near the intake that might have contributed to TC+ or EC+ results? (Describe)						

TREATMENT

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
1. If continuous chlorination treatment is provided, was there any equipment failure?					
a. Did the distribution system maintain chlorine residual?					
b. Was emergency chlorination initiated? If yes, for how long?					
c. Did the distribution system lose chlorine residual?					

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

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TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
2. If routine chlorination is not provided, was emergency chlorination initiated? If Yes, when?						
3. Inspect each point where disinfectant is added and report						
a. Is the disinfectant feed pump feeding disinfectant?						
b. What is the feed rate of disinfectant in ml/minute?						
c. What is the concentration of the disinfectant solution being fed? (percent or mg/l of chlorine as HOCl)						
d. By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)						
e. What is the age (days) of the disinfectant solution currently being used at this treatment location?						
f. What is the raw water flow rate at the point where disinfectant is added in gallons per minute?						
g. What is the total chlorine residual measured immediately downstream from the point of application?						
h. What is the free chlorine residual measured immediately downstream from the point of application?						
i. What is the contact time in minutes from the point of disinfectant application to the first customer?						

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
1. What is the height of the sample tap above grade? (inches)				
2. Is the sample tap located in an exterior location or is it protected by an enclosure?				
3. Is the sample tap threaded, have a swing arm (kitchen sink) or an aerator (sinks)?				
4. Is the sample tap in good condition, free of leaks around the stem or packing?				
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?				
6. Is the sample tap and areas around the sample tap clean and dry (free of animal droppings other contaminants or spray irrigation systems)?				
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection?				
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.).				
9. Is this sample tap designated on the sampling plan submitted with this information request?				
10. What were the weather conditions at the time of the positive sample (rainy, windy,				

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

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SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
and sunny)?				

STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. Is each tank locked to prevent unauthorized access?					
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?					
3. Is the overflow on each tank screened?					
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?					
5. Is the roof/cover of the tank sealed and free of any leaks?					
6. Is the tank above ground or buried?					
a. If buried or partially buried, are there provisions to direct surface water away from the site.					
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?					
8. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?					
9. What is the measured chlorine residual (total/free) of the water exiting the storage tank today?					
10. What is the volume of the storage tank in gallons?					
11. Is the tank baffled?					
12. Prior to the TC+ or EC+, what was the previous date item #1-7 were checked and documented?					

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure maintained in the distribution system?	
2. Did pressure in the distribution system drop to less than 5 psi prior to positive bacti?	
3. Has the distribution system been worked on within the last week? (taps, hydrant flushing, main breaks, mainline extensions, etc.) If yes, provide details.	
4. Are there any signs of excavations near the distribution system not under the direct control of maintenance staff?	
5. Was the distribution system inspected for mainline leaks? Was there a mainline leak?	
6. If there was a mainline leak, when was it repaired?	
7. On what date was the distribution system last flushed?	
8. Does the system have a written flushing procedure?	

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

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DISTRIBUTION SYSTEM		SYSTEM RESPONSES
9. Does the system have an active cross-connection control program?		
10. What is name & phone number of the Cross-Connection Control Program Coordinator?		
11. Is the review and testing of backflow prevention devices current?		
12. On what date was the last physical survey of the system done to identify cross-connections?		
BOOSTER STATION		Response
1. Does the system have a booster pump? How many?		
2. Does the system have a standby booster pump if the main pump fails?		
3. Prior to bacteriological quality problems, did a booster pump fail?		
4. Was there standing water, leakage at the booster station?		
GENERAL OPERATIONS:		Response
1. Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?		
2. Where there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located.		
3. Does the system have backup power or elevated storage?		
4. During or soon after bacteriological quality problems, were any complaints received of any customers' illness suspected of being waterborne? How many?		
5. What were the symptoms of illness if complaints were received about customers being sick?		

ADDITIONAL INFORMATION TO BE SUBMITTED WITH RESPONSES TO THE ABOVE QUESTIONS

1. Sketch of System showing all sources, treatment locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
2. A set of photographs of the well, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by our Division.
3. Name, certification level, and certificate number of the Operator in Responsible Charge.
4. Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.
5. Updated source water assessment(s) (DWSAP) if there have been changes to well construction or potentially contaminating activities (PCA list) since last inspection.

SUMMARY: BASED ON THE RESULTS OF THE INVESTIGATION AND ANY OTHER INFORMATION AT YOUR DISPOSAL, WHAT DO YOU BELIEVE TO BE THE CAUSE OF THE POSITIVE TOTAL COLIFORM SAMPLES FROM THE PUBLIC WATER SYSTEM?

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

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CERTIFICATION: I CERTIFY THAT THE INFORMATION SUBMITTED IN RESPONSE TO THE QUESTIONS ABOVE IS ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE

NAME: _____ TITLE: _____ DATE: _____

State Water Resource Control Board (SWRCB) – Division of Drinking Water (DDW) – Monterey District

Small Water System Bacteriological Sample Siting Plan

Systems serving >1,000 Population with 2 Wells or Less

I. System Information

System Name & ID Number: _____

PWS Classification: _____

Active Service Connections: _____

(Number of residences and/or buildings served by the system)

Monthly Population

(for Community systems)

Daily Population

(for Transient or Non-Transient

Non Community systems)

(Residents or number of individuals served each day by system during busiest month)

Source(s): _____

(List all water supply sources wells, springs, lakes, etc).

II. Routine Sampling FrequencyThe water system must collect _____ routine samples at a frequency of once every _____
of Sample/s month or calendar quarter**III. Routine and Repeat Sampling Sites**

* Routine Sample Site No. 1: _____

Routine distribution sample locations cannot include water sources (i.e. Wells, storage tanks, pressure tanks, fire hydrants, blow-offs or the entry point to the distribution system).

If this routine sample contains coliform bacteria, the water system must collect a set of repeat samples within 24 hours of being notified of the result. (If your routine sampling frequency is equal to or less than one sample per month, the repeat sample set must consist of **4** samples. If your routine sampling frequency is greater than one sample per month, the repeat sample set need only consist of **3** samples.)

In addition, please see Section VI for instructions on source water monitoring for compliance with the GWR when a routine distribution bacteriological sample shows the presence of total coliform bacteria.

Repeat Sample Set No. 1:**Repeat sample site No. 1:** _____(Collect one sample at the **original** routine sample site)**Repeat sample site No. 2:** _____(Collect one sample within five connections **upstream**)**Repeat sample site No. 3:** _____(Collect one sample within five connections **downstream**)**Repeat sample site No. 4:** _____

(Collect one additional sample within five connections upstream or downstream)

- A routine sample site must be designated for each pressure zone or separate area served by the water system. The routine sample sites must be rotated such that they are all sampled on a regular basis. If this water system must designate more than one routine sample site, please do so on the following page and *submit a rotation schedule if applicable*.

Check one of the following:

- ☐ Only one routine sample site is necessary to adequately represent the system. Additional routine and repeat sample sites are not attached.
- ☐ This water system contains more than one pressure zone or separate area.

(This section need only be completed if your water system must designate more than one routine sample site.)

Routine Sample Site No. 2: _____

Routine and repeat sample locations **cannot** include water sources (i.e. Wells, storage tanks, pressure tanks, fire hydrants, blow-offs, or the entry point to the distribution system).

If this routine sample contains coliform bacteria, the water system must collect a set of repeat samples within 24 hours of being notified of the result. (If your routine sampling frequency is equal to or less than one sample per month, the repeat sample set must consist of 4 samples. If your routine sampling frequency is greater than one sample per month, the repeat sample set need only consist of 3 samples.)

In addition, please see Section VI for instructions on source water monitoring for compliance with the GWR when a routine distribution bacteriological sample shows the presence of total coliform bacteria.

Repeat Sample Set No. 2:

Repeat sample site No. 1: _____

(Collect one sample at the original routine sample site)

Repeat sample site No. 2: _____

(Collect one sample within five connections upstream)

Repeat sample site No. 3: _____

(Collect one sample within five connections downstream)

Repeat sample site No. 4: _____

(Collect one additional sample within five connections upstream or downstream)

Routine Sample Site No. 3: _____

Routine and repeat sample locations **cannot** include water sources (i.e. Wells, storage tanks, pressure tanks, fire hydrants, blow-offs, or the entry point to the distribution system).

If this routine sample contains coliform bacteria, the water system must collect a set of repeat samples within 24 hours of being notified of the result. (If your routine sampling frequency is equal to or less than one sample per month, the repeat sample set must consist of 4 samples. If your routine sampling frequency is greater than one sample per month, the repeat sample set need only consist of 3 samples.)

In addition, please see Section VI for instructions on source water monitoring for compliance with the GWR when a routine distribution bacteriological sample shows the presence of total coliform bacteria.

Repeat Sample Set No. 3:

Repeat sample site No. 1: _____

(Collect one sample at the original routine sample site)

Repeat sample site No. 2: _____

(Collect one sample within five connections upstream)

Repeat sample site No. 3: _____

(Collect one sample within five connections downstream)

Repeat sample site No. 4: _____

(Collect one additional sample within five connections upstream or downstream)

IV. Routine Sampling During The Month Following A Positive Sample

If a public water system for which **fewer than 5 routine distribution samples per month (including systems on a quarterly sampling frequency)** are collected has one or more total coliform positive samples, the water supplier shall collect at least 5 routine distribution samples during the following month. These 5 samples can be collected over the course of the month or all on the same day. Please list the locations from which these 5 routine distribution samples will be collected:

1. _____ 2. _____ 3. _____
4. _____ 5. _____

V. System Map or System Schematic

Attach a **system schematic or map** that shows the piping layout of the distribution system, the location of all **routine and repeat** sample sites, raw water sources, storage facilities, pressure zones, the **entry point** of water into the distribution system and the direction of water flow.

VI. Raw Water Source Sampling for Compliance with the Groundwater Rule

Groundwater systems with 2 or less active wells: **in addition to required distribution repeat sites, each well** must be sampled within 24 hours of notification when a routine distribution bacteriological sample shows the presence of total coliform bacteria.

If a source water sample result is positive for *E. coli*, notification to SWRCB-DDW and a Tier 1 Public Notification are required within 24 hours of notification to the water system of the *E. coli* positive result

If the source water is *E. coli* negative but total coliform positive, contact SWRCB-DDW for further instructions

Provided below is a link to USEPA's website providing additional guidance on the Groundwater Rule:
<http://www.epa.gov/safewater/disinfection/gwr/compliancehelp.html>

VII. Quarterly Coliform Monitoring of Disinfected Wells

Bacteriological monitoring of raw water source/s with disinfection is intended to detect a degradation of the groundwater quality that would otherwise be masked by the chlorination treatment. The water system shall initiate a minimum of at least **quarterly** raw water monitoring for coliform bacteria from each well with disinfection treatment. Should a well sample show positive for coliform bacteria, please contact the Monterey District office for follow-up procedures.

- **Source Name & Primary Station Code # Site No. 1:** _____
- **Source Name & Primary Station Code # Site No. 2:** _____

The quarterly raw water coliform samples should be labeled as "Other" and will not be counted towards compliance with the Total Coliform Rule for distribution monitoring.

If a quarterly source sample tests positive for coliform and *E. coli* negative, SWRCB-DDW recommends that the water system collects a confirmation sample within 24 hours of notification and request analysis using an enumeration method.

If a source sample tests positive for *E. coli*, contact SWRCB-DDW for further instructions.

VIII. Personnel and Laboratory Notification

Trained Sampler:

(Sample collection must be performed by a person trained in sample collection. Provide name & phone # of sampler.)

Certified Laboratory:

(Provide the name and phone # of the certified lab doing your water analysis testing.
Arrangement must be made for weekend and holiday analysis testing if needed.)

Notification:

Laboratory to notify persons designated below within 24 hours whenever a sample is found to contain coliform bacteria. (Listed personnel shall contact the SWRCB-DDW as indicated in Section IX.

1. _____
(Name) (Daytime Phone #) (Evening Phone #)

2. _____
(Name) (Daytime Phone #) (Evening Phone #)

IX. Notification to the SWRCB-DDW

The water system must notify the SWRCB-DDW, Monterey District Office, within 24 hours of a violation of the total coliform maximum contaminant level exceedance or when any sample is fecal or *E. coli* positive.

Jan Sweigert, P.E.
District Engineer, Monterey District
SWRCB-DDW - Field Operations Branch

(Daytime Phone #) (831) 655-6934 (Evening Cell#) (831) 595-0058
Office (831)-655-6939 (Day or Night-Leave Message)

Darryl Wong
Environmental Health Manager
San Benito County Environmental Health Department

(Daytime Phone #) (831) 636-4035
On call office staff (831) 902-7248

X. Monthly Summary of Distribution System Coliform Monitoring Report (MSR)

Person responsible for reviewing & confirming accuracy of laboratory coliform analysis reports, signing & submitting the MSR.

MSR (enclosed) is due by the 10th of each month following completion of analysis.

Name: _____ Title: _____

Signature of System Representative: _____ Date: _____

KEEP A COPY OF THIS FORM FOR YOUR REFERENCE AND USE

Additional Information: When responding to a laboratory report of bacterial contamination, keep in mind the following:

1. Coliform bacteria should not be present in drinking water and the presence of coliform indicates a potentially serious problem. Appropriate investigation should be performed immediately.
2. Check water system components such as water sources, filtration and/or chlorination equipment and storage tanks for indications of unusual conditions or problems.
3. Correct problems immediately, do not wait for results of follow-up to take action.